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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|-----------------------------|
| 10/768,614 | 01/30/2004 | Robert G. DeMoor | TI-35548 | 6753 |
| 23494 7590 08/10/2007 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265 | | | EXAMINER LE, TUAN H | |
| | | | ART UNIT 2622 | PAPER NUMBER |
| | | | NOTIFICATION DATE 08/10/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/768,614 | Applicant(s) DEMOOR, ROBERT G. | |
| | Examiner Tuan H. Le | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action is in response to applicant's amendment filed on May 11, 2007. Claims 1-4 and 8-16 are pending in this amendment.

Response to Arguments

After thoroughly reviewing applicant's argument, it is found that they are not persuasive. Thus, claims 1-4 and 8-16 maintain as being rejected. The following are examiner's arguments.

Regarding **claim 8**, the applicant submits that "pre-radiation is not a simulated image acquisition as specifically identified in claim 8", wherein pre-radiation is described by Okamura (U.S. Pat. 6,035,135), Remarks, pg. 8 lines 8-17. The examiner respectfully disagrees. More specifically, in claim 8 the applicant only claims that "a method of acquiring an image with a digital camera having predetermined features, the method comprising:

simulating the acquisition of an image by the digital camera; and

after a preselected period of time, acquiring an image with the digital camera".

Therefore, the pre-radiation, wherein preliminary activation of flash 209 is activated in order to select a right photometry circuit before an image is finally sensed (Okamura, Fig. 4, Fig. 5, column 7 lines 37-61), corresponds to simulating the acquisition of an image. After a right photometry is selected, an image is sensed with the right photometry (Okumura, column 7 lines 57-61). This corresponds to acquiring an image with the digital camera.

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Regarding **claim 1**, applicant claims a controllable shutter without specifying its structure. Therefore, a shutter with two curtains is still applied for the rejection of claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by

Okamura (U.S. Pat. 6,035,135).

Regarding **claim 8**, Okamura discloses a method of acquiring an image with a digital camera having predetermined features, the method comprising:

simulating the acquisition of an image by the digital camera (see Okamura, Fig. 4, Fig. 5, column 7 lines 37-61, wherein preliminary activation of flash 209 is activated in order to select a right photometry circuit); and

after a preselected period of time, acquiring an image with the digital camera (see Okamura, column 7 lines 57-61, wherein an image is sensed with the right photometry).

As for **claim 9**, as previously mention in the discussion of claim 8, Okamura discloses all of the limitations of the parent claim. In addition, Okamura discloses that simulating the acquisition of an image includes providing the sights (see Okamura, Fig. 4, Fig. 5, column 7 lines 37-61, wherein preliminary activation of flash 209 is activated in order to select a right photometry circuit and sounds associated with the acquisition of an image, (it is inherent that exposure control has a shutter which generates sounds)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Kanzaki (U.S. Pat. 5,614,978).

Regarding **claim 1**, Kanzaki discloses a film camera comprising:

a photosensitive region (film) for recording an a optical image, (see Kanzaki, column 2 lines 35-37);

a controllable shutter (3) for exposing the photosensitive region, (see Kanzaki, Fig. 1, and column 2 lines 35-38); and

a timer (1), the timer providing a selected time delay (step 108) between a first activation of the shutter (step 107) and a second activation of the shutter (step 109), the photosensitive region not recording an optical image during the first activation of the shutter, (see Kanzaki, Fig. 1, Fig. 4, column 1 lines 12-17, column 2 lines 40-49,

wherein controller 1 determines a corrected shutter time and controls a driving of the front curtain 4 and rear curtain based on the corrected shutter time and wherein controller has one or more timers, see column 4 lines 14-16). Kanzaki does not disclose that the controllable shutter and the timer are used in a digital camera.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace, while maintaining the same functions of the controllable shutter and the timer, the film camera as described by Kanzaki et al with a digital camera because such incorporation produces images that are instantly available for viewing, editing, printing, and sharing.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzaki (U.S. Pat. 5,614,978) and further in view of Maitani et al (U.S. Pat. 4,272,176).

As for **claim 2**, as previously mentioned in the discussion of claim 1, Kanzaki discloses all of the limitations the parent claim. However, Kanzaki does not disclose that the first activation of the shutter is accompanied by sounds of typical shutter operation.

On the other hand, Maitani et al discloses an acoustic indicator which is used in combination with an electrical shutter of a camera, (see Maitani et al, Fig. 1, column 2 lines 52-54)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the acoustic indicator as described by Maitani et al into the digital camera as described by Kanzaki in order to generate sound

to indicate a camera shutter activation because such incorporation can prevent to-be-photographed person from moving while a photograph is captured.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzaki (U.S. Pat. 5,614,978) and further in view of prior art admitted by applicant (PAAA, U.S. Pub. 2005/0168592).

As for **claim 3**, as previously mentioned in the discussion of claim 1, Kanzaki discloses all of the limitations the parent claim. However, Kanzaki does not disclose a flash mechanism which receives a low-power activation during the initial shutter activation.

On the other hand, PAAA discloses a flash assembly (13) which is activated by the processing unit 12, (see PAAA, Fig. 1, paragraph [0003]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the flash assembly as described in PAAA with the front curtain of the shutter device as described by Kanzaki in order to obtain a high accuracy for the shutter time because such combination allows the shutter device, thus the camera, to be used in dark places or at night time.

As for **claim 4**, as previously mentioned in the discussion of claim 1, Kanzaki discloses all of the limitations the parent claim. However, Kanzaki does not disclose that the first shutter activation is a simulation of signal acquisition.

On the other hand, PAAA discloses that activation of assembly 14, in a complex system, causes processing unit 12 monitor external illumination level and control the time in which the photo-sensitive region is illuminated by the subject.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the activation of shutter as described by PAAA into the camera as described by Kanzaki in order to perform simulation of image acquisition because such incorporation results in sufficient brightness for photo-sensitive region when an image is photograph in a low-light or dark condition. Thus a good-quality image is obtained.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura (U.S. Pat. 6,035,135) and further in view of Chatani et al (U.S. Pub. 2004/0075743 A1).

Regarding **claim 10**, Okamura teaches the method of claim 8. However, Okamura does not teach

providing a program associated with a processing unit for identifying the predetermined features;

acquiring a series of images and applying the images to the processing unit; and analyzing the images using the program.

On the other hand, Chatani et al discloses

providing a program associated with a processing unit (306) for identifying the predetermined features (see Chatani et al, Fig. 3, paragraph [0012], wherein a computer program obtains image selection parameters);

acquiring a series of images and applying the images to the processing unit (see Chatani et al, paragraph [0011], wherein the imaging device is capable of capturing image data for a plurality of digital images); and

analyzing the images using the program, (see Chatani et al, Fig. 8 step 808, wherein subset of images with specified parameters is generated).

Therefore, it would have been obvious to an artisan to combine image analysis by using the program as disclosed by Chatani et al with the method as disclosed by Okamura in order to analyze a series of images because such combination provides automatic selection of digital photographs based on user provided criteria and allows user to preview images under various conditions, (Chatani et al, paragraph [0009]).

As for **claim 11**, as previously mentioned in the discussion of claim 10, Okamura and Chatani et al disclose all of the limitations of the parent claim. In addition, Chatani et al discloses that the first image in which the predetermined feature is identified is stored, (see Chatani et al, Fig. 4, wherein image in the buffer 410 is stored in memory 412).

As for **claim 12**, as previously mentioned in the discussion of claim 10, Okamura and Chatanie et al discloses all of the limitations of the parent claim. In addition, Chatani et al discloses that the acquiring of a series images is provided in response to signals from a timing unit (see Chatanie et al, paragraphs [0007] and [0011], wherein multiple images are capture in high rate photography).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzaki (U.S. Pat. 5,614,978) and further in view of Fujii et al (U.S. Pub. 2005/0007486).

Regarding **claim 13**, Kanzaki teaches the camera of claim 1. However, Kanzaki does not disclose:

a first mode of operation, the digital camera in the first mode of operation acquiring an image in response to user input; and

a second mode of operation, the digital camera simulating acquiring an image in response to user input in the second mode of operation, the digital camera acquiring an image a preselected time after the simulating acquiring an image.

On the other hand, Fujii et al discloses a digital camera (see Fujii et al, Fig. 3) comprising:

a first mode of operation (single photographing), the digital camera in the first mode of operation acquiring an image in response to user input, (see Fujii et paragraph [0095], wherein one-shot AF does not consider lens position history before taking a picture); and

a second mode of operation (sequence photographing), the digital camera simulating acquiring an image in response to user input in the second mode of operation, the digital camera acquiring an image a preselected time after the simulating acquiring an image, (see Fujii et paragraph [0095], wherein AF controller 160 considers lens position history thus image can only be captured after a preselected time);

Therefore, it would have been obvious to an artisan to combine the single and sequence mode of operation as described by Fujii et al with the camera as described by Kanazaki in order to have a camera with different modes of operation because such combination provides a short time for re-achieving focusing on the main object by driving the optical system in small amount, (Fujii et al, paragraph [0011]).

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzaki (U.S. Pat. 5,614,978) and further in view of Fujii et al (U.S. Pub. 2005/0007486) and Chatani et al (U.S. 2004/0075743).

Regarding **claim 14**, Kanzaki teaches the camera of claim 1. However, Kanzaki does not disclose:

a first mode of operation, the digital camera in the first mode of operation acquiring an image in response to user input; and

a second mode of operation;

On the other hand, Fujii et al discloses a digital camera (see Fujii et al, Fig. 3) comprising:

a first mode of operation (single photographing), the digital camera in the first mode of operation acquiring an image in response to user input, (see Fujii et paragraph [0095], wherein one-shot AF does not consider lens position history before taking a picture); and

a second mode of operation (sequence photographing), (see Fujii et paragraph [0095], wherein AF controller 160 considers lens position history thus image can only be captured after a preselected time);

Therefore, it would have been obvious to an artisan to combine the single and sequence mode of operation as described by Fujii et al with the camera as described by Kanazaki in order to have a camera with different modes of operation because such combination provides a short time for re-achieving focusing on the main object by driving the optical system in small amount, (Fujii et al, paragraph [0011]).

However, Kanzaki and Fujii do not disclose that the digital camera selecting for acquisition an image having predetermined features.

On the other hand, Chatani et al discloses a digital camera which is capable of taking images with specified parameter (see Chatanie et al, paragraphs [0011] and [0012], wherein image selection parameters are entered).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine image capture with specified parameter as described by Chatanie et al with the digital camera as described by Kanzaki and Fujii et al in order to selectively store desired images because such combination saves time to search through a whole image database for a certain image.

As for **claim 15**, as previous mentioned in the discussion of claim 14, Kanzaki, Fujii et al, and Chatani et al disclose all of the limitations of the parent claim. In addition, Chatani et al discloses that the predetermined features are determined by a pattern recognition program (see Chatanie et al, paragraphs [0011] and [0012], wherein image selection parameters are entered).

As for **claim 16**, as previous mentioned in the discussion of claim 14, Kanzaki, Fujii et al, and Chatani et al disclose all of the limitations of the parent claim. In addition, Chatani et al discloses that the predetermined features are facial expression (see Chatani et al, paragraph [0053], wherein semantic parameters include closed eyes, crossed eye).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ikami et al (U.S. 6, 351,286) discloses an image producing apparatus comprising imaging means having a solid state image sensor for producing image data, exposure control means for starting and stopping exposure of the solid state image sensor at predetermined time.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

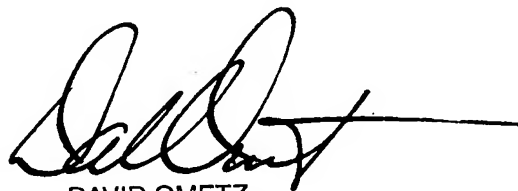
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan Le/
7/31/07

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER